APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/836,125	04/16/2001	David Bautista-Lloyd	SUNO4-20(P5753)	5808

22468	7590	02/23/2005	EXAMINER

CHAPIN & HUANG L.L.C.
WESTBOROUGH OFFICE PARK
1700 WEST PARK DRIVE, SUITE 120
WESTBOROUGH, MA 01581

PEREZ DAPLE, AARON C

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 September 2004*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-41* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

U.S. Patent and Trademark Office

PTOL-326 (Rev. 1-04)   Office Action Summary   Part of Paper No./Mail Date 20050215

DETAILED ACTION

1.   This Action is in response to Amendment filed 9/16/04, which has been fully considered.

2.   Claims 1-41 are presented for examination.

3.   This Action is FINAL.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5.   **Claims 1-6, 8, 16, 23, 30-33 and 35** are rejected under 35 U.S.C. 102(e) as being

anticipated by Tsutsumitake (US 6,480,883 B1) (hereinafter Tsutsumitake).

As for claim 1, Tsutsumitake discloses a method for providing data updates to a page,

wherein the page includes multiple regions of dynamic content, wherein the regions of the

page are displayed within a presentation program executing on a client, wherein a server

transfers the page to the client over a network, and wherein the server performs:

detecting state changes (col. 8, lines 57 – col. 9, line 17);

queuing information on state changes (queuing is inherent to TCP/IP for transmission of

packets on the network, Fig. 1; *see also* col. 17, lines 1-14, col. 17, line 55 – col. 18, line 7);

generating an update package including content indicating the detected state changes (col. 8, lines 57-65, "An event generating unit...time has arrived."; col. 10, lines 7-15, "The event receiving unit...on the display...."); and

sending the update package to the client, wherein the presentation program in the client renders the content in the update package in at least one region (col. 8, lines 50-56, "An event request...to the client 11."; col. 10, lines 7-15, "The event receiving unit...on the display....").

6. As for claim 16, Tsutsumitake discloses a system for providing data updates to a page, wherein the regions and the page are displayed within a presentation program executing on a client, comprising:

a processing unit (information processing server 10, Fig. 1);

a network connection enabling the processing unit to transfer the page to the client over the network (network 12, Fig. 1);

a memory device (inherent to information processing server 10, Fig. 1; col. 19, lines 8-34, "The function element...requiring such information."); and

a computer readable medium including code executed by the processing unit to perform:

(i) detecting state changes (col. 8, line 24 – col. 9, line 5, "Fig. 1 shows...transmission unit 106.");

(ii) queuing information on the state changes (queuing is inherent to TCP/IP for transmission of packets on the network, Fig. 1; *see also* col. 17, lines 1-14, col. 17, line 55 – col. 18, line 7);

(iii) generating an update package including content indicating the detected state

changes (col. 8, lines 57-65, "An event generating unit...time has arrived."; col. 10, lines

7-15, "The event receiving unit...on the display....");

(iv) sending the update package to the client, wherein the presentation program in the

client renders the content in the update package in at least one region (col. 8, lines 50-56,

"An event request...to the client 11."; col. 10, lines 7-15, "The event receiving unit...on

the display....").

7.   As for claims 23 and 30, Tsutsumitake discloses a system and an article of manufacture

for providing updates to a page, wherein the page includes multiple regions of dynamic

content, wherein the regions and the page are displayed within a presentation program

executing on a client; wherein a server transfers the page to the client over a network,

comprising:

means for detecting state changes (col. 8, line 24 – col. 9, line 5, "Fig. 1

shows...transmission unit 106.");

means for queuing information on state changes (queuing is inherent to TCP/IP for

transmission of packets on the network, Fig. 1; *see also* col. 17, lines 1-14, col. 17, line 55 –

col. 18, line 7);

means for generating an update package including content indicating the detected state

changes (col. 8, lines 57-65, "An event generating unit...time has arrived."; col. 10, lines 7-

15, "The event receiving unit...on the display...."); and

means for sending the update package to the client, wherein the presentation program in

the client renders the content in the update package in at least one region (col. 8, lines 50-56,

"An event request...to the client 11."; col. 10, lines 7-15, "The event receiving unit...on the

display....").

8.   As for claim 2, Tsutsumitake discloses the method of claim 1, wherein the update

package is generated and sent to the client computer in response to a request from the client

computer (col. 10, lines 7-15, "The event receiving unit...on the display....").

9.   As for claim 3, Tsutsumitake discloses the method of claim 1, wherein the presentation

program comprises a web browser and wherein the request comprises a HyperText Transfer

Protocol (HTTP) request (col. 7, line 66 – col. 8, line 6, "In FIG. 1...(Microsoft

Corporation.)").

10.   As for claims 4 and 31, Tsutsumitake discloses the method and article of manufacture of

claims 1 and 30, wherein queuing information on the state changes further comprises:

        maintaining one update queue for at least one region of dynamic content that is capable

of being displayed in the presentation program, wherein the update queue include state

change information to be rendered in the at least one region associated with the update queue

(an update queue is considered inherent since TCP/IP queues the update in packets prior to

transmission over the network ; col. 10, lines 7-15; Fig. 1).

11.   As for claims 5 and 32, Tsutsumitake discloses the method and article of manufacture of

claims 4 and 31, further comprising:

        providing an event listener capable of detecting state changes, wherein one event listener

is associated with each update queue (col. 8, line 57 -col. 9, line 5, "An event

generating...transmission unit 106.");

detecting, with the event listener, a state change (col. 8, line 57 -col. 9, line 5, "An event

generating...transmission unit 106."); and

adding, with the event listener, information on the state change to the update queue

associated with the event listener (col. 8, line 57 -col. 9, line 5, "An event

generating...transmission unit 106.").

12.   As for claims 6 and 33, Tsutsumitake discloses the method and article of manufacture of

claims 5 and 32, wherein one event listener and associated update queue provide state change

information for one instance of a component type, wherein the region associated with the

update queue renders information in the client presentation program on the instance of the

component type (col. 8, line 57-col. 9, line 5, "An event generating...transmission unit 106.";

col. 10, lines 7-15, "The event receiving unit...on the display....").

13.   As for claims 8 and 35, Tsutsumitake discloses the method and article of manufacture of

claims 4 and 31, wherein the regions and the corresponding update queues provide state

change information for one component type (col. 8, line 57 -col. 9, line 5, "An event

generating...transmission unit 106.").

Claim Rejections - 35 USC § 103

14.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

15.   **Claims 9-15, 17-22, 24-29 and 36-41** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Tsutsumitake (US 6,480,883 B1) in view of Smith et al. (US

2002/0016839 A1) (hereinafter Smith).

16.   As for claims 9, 17, 24, and 36, Tsutsumitake teaches receiving a client request for the

page and generating a client session object for the client request (col. 11, lines 29-62, "if the

request...is prevented."). Tsutsumitake further teaches generating an update queue (inherent)

for the updating at least one region of dynamic content in a page (col. 10, lines 7-15, "The

event receiving unit...on the display...."). Although obvious to one of ordinary skill in the

art, Tsutsumitake does not specifically disclose generating an update queue array for the

client session object. Smith teaches generating an update queue array for a client session

object in order to dynamically adjust transmission rates to the speed at which a client can

receive and process data while ensuring that updated data received by the client is current

(paragraphs 0014-0015, "The client manager...should be transmitted."; paragraph 0011, "Yet

another object...client is current.").

It would have been obvious to one of ordinary skill in the art to modify Tsutsumitake by

generating an update queue array for a client session object in order to dynamically adjust

transmission rates to the speed at which a client can receive and process data while ensuring

that updated data received by the client is current, as taught by Smith above.

17.   As for claims 10, 18, 25 and 37, Tsutsumitake teaches a method and system similar to

claims 9, 17 and 24 further comprising:

receiving a client request for information on a requested component instance from one

region of the page (col. 11, lines 29-42, "If the request...limited to this."); and

registering the client session with an event listener providing state change information for the requested component instance, wherein the event listener adds state change information to one update queue for the component type (col. 8, line 57 -col. 9, line 5, "An event generating...transmission unit 106."; col. 11, lines 29-62, "if the request...is prevented.").

Although obvious to one of ordinary skill in the art, Tsutsumitake does not specifically disclose the use of an update queue array for the registered client session. Smith teaches the use of an update queue array for the registered client session in order to dynamically adjust transmission rates to the speed at which a client can receive and process data while ensuring that updated data received by the client is current (paragraphs 0014-0015, "The client manager...should be transmitted."; paragraph 0103, "Events transmitted...particular implementation."; paragraph 0011, "Yet another object...client is current.").

It would have been obvious to one of ordinary skill in the art to modify Tsutsumitake by using an update queue array for the registered client session in order to dynamically adjust transmission rates to the speed at which a client can receive and process data while ensuring that updated data received by the client is current, as taught by Smith above.

18.   As for claims 11, 19, 26 and 38, Tsutsumitake discloses a method similar to claims 10, 18 and 37 further comprising:

determining one event listener providing state change information to the update queue for an instance of the component type other than the requested instance of the component type (col. 8, line 57 -col. 9, line 5, "An event generating...transmission unit 106."; col. 11, lines 29-62, "if the request...is prevented."); and

submitting a request to the determined event listener to unregister the client session for

the client submitting the client request (col. 8, line 57 -col. 9, line 5, "An event

generating...transmission unit 106."; col. 11, lines 29-62, "if the request...is prevented.").

19.   As for claims 12, 20, 27, 39, Tsutsumitake does not specifically disclose maintaining at

least one queue for each client session object nor maintaining plural queues associated with

plural client session objects. Smith teaches maintaining at least one queue for each client

session object and maintaining plural queues associated with plural client session objects in

order to dynamically adjust transmission rates to the speed at which a client can receive and

process data while ensuring that updated data received by the client is current (paragraphs

0014-0015, "The client manager...should be transmitted."; paragraph 0103, "Events

transmitted...particular implementation."; paragraph 0011, "Yet another object...client is

current.").

It would have been obvious to one of ordinary skill in the art to modify Tsutsumitake by

maintaining at least one queue for each client session object or maintaining plural queues

associated with plural client session objects in order to dynamically adjust transmission rates

to the speed at which a client can receive and process data while ensuring that updated data

received by the client is current, as taught by Smith above.

20.   As for claims 13, 14, 15, 21, 22, 28, 29, 40 and 41 Tsutsumitake teaches receiving a

refresh request from a client and returning to the requesting client state change information

for the region indicated in the refresh request to render in the region of the page (col. 1, lines

44-59, "The user on...TV broadcasting."; col. 11, lines 29-62, "if the request...is

prevented."). Tsutsumitake does not specifically disclose determining a plurality of queues

for a plurality of determined client session objects. Smith teaches determining a plurality of

queues for a plurality of determined client session objects in order to dynamically adjust

transmission rates to the speed at which a client can receive and process data while ensuring

that updated data received by the client is current (paragraphs 0014-0015, "The client

manager...should be transmitted."; paragraph 0103, "Events transmitted...particular

implementation."; paragraph 0011, "Yet another object...client is current.").

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify Tsutsumitake by determining a plurality of queues for a plurality of determined

client session objects in order to dynamically adjust transmission rates to the speed at which

a client can receive and process data while ensuring that updated data received by the client

is current, as taught by Smith above.

21.   **Claims 7 and 34** are rejected under 35 U.S.C. 103(a) as being obvious over Tsutsumitake

(US 6,480,883 B1) in view of Bayeh et al. (US 6,633,914 B1) (hereinafter Bayeh). As for

claims 7 and 34, Tsutsumitake discloses monitoring the component types and instantiating

one event listener for each instance of the component type (col. 8, line 57-col. 9, line 5, "An

event generating...transmission unit 106."). Tsutsumitake does not specifically disclose

using a servlet to perform these functions. Bayeh teaches using a servlet to perform these

functions in order to monitor and respond to client requests (col. 4, line 49 - col. 5, line 27,

"Servlets are...the requesting client."). It would have been obvious to one of ordinary skill

in the art at the time of the invention to modify Tsutsumitake by using a servlet for

monitoring the component types and instantiating one event listener for each instance of the

component type in order to monitor and respond to client requests, as taught by Bayeh above.

Response to Arguments

112, 1st Paragraph, Claim Rejections

22.   The rejection of claims 11, 19, 26 and 38 under 35 U.S.C. 112, first paragraph, is hereby

withdrawn in view of Remarks, which are found persuasive.

112, 2nd Paragraph, Claim Rejections

23.   The rejection of claims 5, 8, 32 and 35 under 35 U.S.C. 112, second paragraph, is hereby

withdrawn in view of Amendment.

102 Claim Rejections

24.   Applicant's arguments filed 9/16/04 with respect to the 102 rejection of claims 1-6, 8, 16,

23, 30-33 and 35 have been fully considered but they are not persuasive.

On pages 24-25 of the Remarks, Applicant asserts that Tsutsumitaki fails to teach or

suggest that the page includes "multiple regions of dynamic content." However, the

Examiner finds that this limitation is inherent to Tsutsumitaki. Referring to the newly cited

definition from webopedia.com, any HTML page includes different regions delimited by

HTML tags (e.g. head, body, table, paragraph, etc.) as understood by one of ordinary skill in

the art. Such a web page is taught by Tsutsumitaki in col. 8, lines 45-49. From the

discussion in Tsutsumitaki, it is clear that regions of the page may be updated as needed in

response to the detected events, with the updates being included in the new page

transmission. Therefore, Tsutsumitaki is sufficient to teach "multiple regions of dynamic

content." Furthermore, Applicant admits that this feature is well-known in the art on page 1,

lines 20-21 of the specification. The Examiner also notes that the claims do not recite

separately updating each region of the page.

On page 25 of the Remarks, Applicant asserts that Tsutsumitaki fails to teach "queuing

information on the state changes." The Examiner respectfully disagrees. First, the

Examiner maintains that queuing is inherent to Tsutsumitaki for the case where multiple

events occur simultaneously or in close succession. In this case, the events would clearly

have to be stored and transmitted in a time-ordered manner in order for the invention to

function as disclosed. Second, Tsutsumitaki discloses the use of TCP/IP protocol (see Fig.

1). Queuing of packets is inherent to TCP/IP, as understood by one of ordinary skill in the

art and explained by Stevens (pg. 2, see *the transport layer*). Therefore, the received event

information would inherently be packetized and queued prior to transmission. Finally, the

Examiner finds that Tsutsumitaki explicitly discloses queuing of information on the state

changes in col. 17, lines 1-14 and again in col. 17, line 55 – col. 18, line 7.

On pages 25-26 of the Remarks, Applicant asserts that Tsutsumitaki fails to teach

generating an update package at the server, as recited in claim 1. The Examiner respectfully

disagrees. Specifically, Tsutsumitaki specifically teaches generating a page update at the

server, which update is subsequently rendered at the client device (col. 10, lines 7-15). The

Examiner interprets that the "updated page" of Tsutsumitaki is the recited "update package."

On page 26 of the Remarks, Applicant asserts that Tsutsumitaki fails to disclose code

executed by the processing unit, as recited in claim 16. The Examiner respectfully disagrees.

It is clear that the server includes a processing unit for executing code for performing the

recited steps. See, for example, Fig. 1, which illustrates server elements for performing these steps as detailed further in the rejection of claim 16 above.

For all the reasons above, claims 1-6, 8, 16, 23, 30-33 and 35 are properly rejected under 35 U.S.C. 102.

103 Claim Rejections

25.   Applicant's arguments filed 9/16/04 with respect to the 103 rejection of claims 9-15, 17-22, 24-29 and 36-41 have been fully considered but they are not persuasive for same reasons cited above with respect to Tsutsumitake.

Applicant further asserts that the Examiner has failed to provide proper motivation for the 103 claim rejections. With respect, the Examiner can find absolutely no basis for this assertion. The Examiner has clearly laid out a motivation for combination of each reference and detailed how the references teach or suggest each limitation of the claim.

Therefore, claims 9-15, 17-22, 24-29 and 36-41 are properly rejected under 35 U.S.C. 103.

Conclusion

26.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. http://www.webopedia.com/TERM/q/queue.html, visited 2/15/05; Stevens, W. Richard, "TCP/IP Illustrated, Vol. 1" New York, 1994, pg. 2.

27.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron C Perez-Daple whose telephone number is (571) 272-3974. The examiner can normally be reached on 9am-5pm.

28.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

_2/15/05_

Aaron Perez-Daple

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100